



# Jobs Act for Public K-12 & Higher Education Institutions

## Edmonds Community College

### About the Jobs Act:

*The Jobs Act for Public K-12 and Higher Education Institutions was funded through the 2010 Supplemental Capital Budget – ESHB 2836 Section 1016. \$50 million was given to Commerce. Commerce awarded 77 grants totaling \$42.5 million. Edmonds Community College is located in the 21<sup>st</sup> Legislative District. For more information: [www.commerce.wa.gov](http://www.commerce.wa.gov)*

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### Walking their talk: becoming one of Washington's leading sustainable community colleges

*Edmonds Community College (EdCC) is a two-year community college serving over 20,000 students in the Lynnwood area. The college offers associate degrees, technical degrees and certificates in high demand jobs, and adult basic education.*

#### Situation:

Even though EdCC incorporated sustainability into its Philosophy Statement in 1996, it wasn't until a combination of rising energy costs, state budget cuts, and a student-led sustainability movement in 2009 that the college decided to make major changes.

"Suddenly we had to walk our talk," said Kevin McKay, vice president of Finance & Operations. "And we had to know how much energy we were using."

#### Solution:

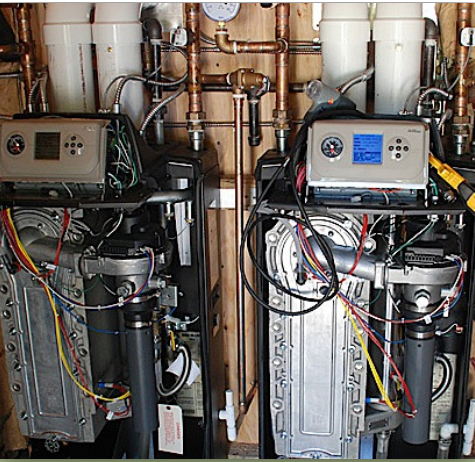
The first step EdCC undertook was a campus-wide energy audit. The audit findings showed EdCC what needed to be done and gave them a baseline from where to start. Just as they embarked on energy saving projects, EdCC was faced with hard choices due to state budget cuts. The college decided to continue investing money into making their campus sustainable and energy efficient, but they didn't have all of the money they needed. "The Jobs Act funding came along just at the right time. If we hadn't had these funds all of the work wouldn't have been done," said McKay "We know that investing in energy efficiency gives us a strong rate of return."

A pivotal new piece of equipment purchased was the Grid Navigator®, an energy management system which monitors, analyzes and controls the

### Project Highlights:

- *Installing an energy management system that controls the entire campus*
- *New boilers and controls*
- *Lighting upgrades across the campus*
- *Estimated annual energy savings \$132,019*





# *“Investing in energy efficiency gives us a strong rate of return.”*

**Kevin McKay**

*Vice President of Finance & Operations*

entire campus. Before installing the Grid Navigator® EdCC, had absolutely no way to figure out their total energy usage. “We were getting separate bills for each building,” McKay said. Now they know exactly where they are using energy. The Grid Navigator® tracks energy use at a detailed level – by building, by zone within a building, and by hour of the day. It also allows them to compare year to year energy use. “We can see exactly what happened in the building and if the energy use went up over the year, we know where and how to fix it.”

New boilers also helped the college become more energy efficient. The campus is strewn with crisscrossing tunnels that deliver hot water to heat buildings. Much of the water came from the campus’ Central Boiler Plant and its very old and inefficient boiler. With an efficiency rating of approximately 75 percent, the boiler was prime for replacement. The new high efficiency, dual-fuel boiler is expected to save approximately \$22,397 annually. The Horticulture building also received a new boiler. The campus’ new boilers allow more precise temperature control. Now, instead of having either really cold or really hot classrooms and offices, the rooms are at a comfortable temperature.

A new control system operates these boilers. The controls, which are similar to a home’s thermostat, manage all of the equipment schedules. They tell the boilers when to come on, how long to warm up, and when to turn off. Working in harmony with the classroom or office’s occupancy sensors and the buildings’ HVAC zones, the controls allow classrooms and offices to be heated or cooled only when people are in the space. These new controls save EdCC a significant amount of money, especially at night when only a few classrooms are being used.

EdCC also changed out old lighting fixtures all across campus. Replacing old lighting is very lucrative because it pays for itself in just a few years. Now, instead of leaving the batting cages’ lights on from dusk to around 10 p.m. when the cages close, the lights come on automatically when a person enters the cage and gets ready to swing their bat. The new parking lot lighting is saving energy for two reasons. First, the light fixtures are now energy efficient fluorescents. And second, each light pole has two banks of lights, one of which only turns on when a person or vehicle enters the lot. All of the old light poles had two banks of lights that stayed on all of the time. The annual savings in lighting is approximately \$31,000.

## **Results:**

EdCC is well on its way to becoming one of Washington’s leading sustainable community colleges. Sustainability is integrated into everything the college does. The new energy saving technologies are expected to save \$132,019 annually.

The savings are going back into the college’s operating budget that funds student services.

“The savings allow us to continue the programs and service our students and community need. Our programs help people rebuild their lives through learning new skills and trades. And that’s good for the economy and helps people get back to work,” said McKay.

## **Measures:**

- HVAC – boiler replacement, pumps & controls
- Cooling tower improvements
- Control system energy optimization
- Lighting
- Window film
- Grid Navigator® energy management system
- Water conservation

**Total project costs: \$ 3,317,758**

**Estimated annual savings: \$ 132,019**

**Grant award amount: \$ 1,510,466**